

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (Currently Amended) A cable connection method for connecting an end of ~~the a~~ conductor of a cable to ~~the a~~ connecting face of a contact of a connector or substrate, such that ~~the a~~ lengthwise direction of said connecting face and ~~the a~~ lengthwise direction of said conductor are mutually matched in the connection, said method ~~characterized in that~~ comprising:
pressuring said end of said conductor ~~is pressured~~ against said connecting face ~~by via~~ a pair of electrodes mutually separated in the lengthwise direction of said conductor; and
passing an electric current ~~is passed~~ between said pair of electrodes, ~~welding to weld~~ said end of said cable and said connecting face together.

2. (Cancelled)

3. (Cancelled)

4. (Currently Amended) The cable connection method according claim 1, ~~characterized in that wherein:~~

~~the a~~ part of said conductor that comes into contact with the connecting face of said contact is formed as a flat surface; and

~~the a~~ part of said conductor that comes into contact with said electrodes is formed as a flat surface.

5. (Cancelled)

6. (Cancelled)

7. (Currently Amended) A cable connection having a configuration in which an end of ~~the a~~ conductor of a cable is connected to ~~the a~~ connecting face of a contact of a connector or substrate such that ~~the a~~ lengthwise direction of said connecting face and ~~the a~~ lengthwise direction of said conductor are mutually matched in the connection, said cable ~~characterized in that comprising:~~

a long elongated welded part ~~is formed~~ in the lengthwise direction of said conductor in ~~the a~~ connecting part between said conductor and said contact,

~~and wherein~~ the state of the welding in said welded part is within the scope from the condition in which the depth at the top of a color changed part forming an arc on said contact is above 0.1 mm to the condition immediately prior to the condition of blasting of said contact.

8. (Currently Amended) A cable connection having a configuration wherein an end of ~~the a~~ conductor of a cable is connected to ~~the a~~ connecting face of a contact of a connector or substrate such that ~~the a~~ lengthwise direction of said connecting face and ~~the a~~ lengthwise

direction of said conductor are mutually matched in the connection, said cable ~~characterized in that comprising:~~

a long elongated welded part is formed in the lengthwise direction of said conductor in the connecting part between said conductor and said contact,

~~and wherein~~ the state of the welding in said welded part is within the scope from the condition in which the dispersion of a layer of precious metal thinly covering the surface of said conductor of said cable forms an alloy layer of that precious metal in said contact that is of a depth of 5 μ m to the condition in which said alloy layer is half the thickness of said contact.

9. (Currently Amended) The cable connection according to claim 7, ~~characterized in that wherein:~~

the part of said conductor that comes into contact with said connecting face of said connector is formed as a flat surface; and

the part of said conductor that comes into contact with said electrodes is formed as a flat surface.

10. (Currently Amended) The cable connection according to claim 8, ~~characterized in that wherein:~~

the part of said conductor that comes into contact with said connecting face of said connector is formed as a flat surface; and

the part of said conductor that comes into contact with said electrodes is formed as a flat surface.

11. (Currently Amended) A cable welding device for connecting an end of ~~the~~a conductor of a cable to ~~the~~a connecting face of a contact of a connector or substrate such that ~~the~~a lengthwise direction of said connecting face and ~~the~~a lengthwise direction of said conductor are mutually matched in the connection, ~~characterized in that~~ said cable welding device comprising:

a base on which said connector or substrate furnishing said contact can be disposed;
a pair of electrodes mutually separated in the lengthwise direction of said conductor;
pressure means capable of pressing, via said pair of electrodes, said end of said conductor in contact with said contact, thereby pressuring said end of said conductor against said connecting face; and

voltage applying means capable of applying voltage between said electrodes.

12. (Currently Amended) The cable welding device according claim 11, ~~characterized by having a configuration wherein when~~ further comprising a plurality of groupings of the conductors and contacts ~~a contact and an end of a conductor exist, wherein~~ said pair of electrodes are shaped to weld and apply pressure to ~~moves to positions enabling each of said groupings at the same time to be welded and applies pressure to each of said groupings.~~

13. (Currently Amended) A cable connection ~~characterized in that said cable,~~ comprising:

a connector including a base having a plurality of conductive contacts, on a surface of the
base, comprising a plurality of signal contacts and a plurality of ground contacts, wherein
individual ground contacts are arranged between pairs of adjacent signal contacts; and

a cable main body including a plurality of wire conductors that connect respectively to
the plurality of contacts, wherein:

each of the wire conductors and each of the contacts are ~~mutually~~ individually and
electrically connected by welding; and

the wire conductors have a flat surface in contact with the respective contacts.

14. (Currently Amended) ~~The~~ A cable connection according to claim 13, characterized in
that comprising:

a connector including a base having a plurality of conductive contacts; and

a cable main body including a plurality of wire conductors that connect respectively to
the plurality of contacts,

wherein each of the wire conductors and each of the contacts are mutually and
electrically connected by welding, whererin:

said base ~~includes~~ comprises a flat plate having a front face and a rear face;₁

said plurality of conductive contacts comprise a plurality of strip-shaped first signal
contacts, positioned at determined intervals along ~~the~~ a y axial direction that is one direction
parallel to said front face, and disposed extending in ~~the~~ a x axial direction that is ~~the other~~
another direction parallel to said front face;₁

said plurality of conductive contacts further comprise a plurality of strip-shaped second signal contacts disposed on said rear face and opposing said first signal contacts such that said flat plate is interposed therebetween;₁ ~~and~~

said plurality of conductive contacts further comprise a plurality of ground contacts, disposed on said front face or said rear face, extending in the x axial direction and between pairs ~~each~~ of said first or second signal contacts;₁ ~~and~~

said wire conductor ~~includes~~ comprises a first signal wire, a second signal wire and a drain wire;₁

said first signal wire ~~connecting~~ is connected to said first signal contact;₁

said second signal wire ~~connecting~~ is connected to said second signal contact;₁ and

said drain wire ~~connecting~~ is connected to said ground contact.

15. (Currently Amended) The cable connection according to claim 14, ~~characterized in that at~~ wherein:

~~the~~ a front face and the rear face of each of said ground contacts are raised above said front and rear faces in ~~the~~ a z axial direction that is a direction orthogonal to said front face and said rear face; ~~and~~

~~each raised part has~~ comprises a conductor extending in the x axial direction.

16. (Currently Amended) The cable connection according to claim 14, ~~characterized in that~~ further comprising a plurality of cables,

wherein each first signal wire, each second signal wire and each drain wire of a the plurality of cables is connected to each first signal contact, each second signal contact and each ground contact of said connector.

17. (Currently Amended) The cable connection according to claim 15, ~~characterized in that further comprising a plurality of cables,~~

wherein each first signal wire, each second signal wire and each drain wire of a the plurality of cables is connected to each first signal contact, each second signal contact and each ground contact of said connector.

18. (New) The cable connection method according to claim 1, wherein:
the welding comprises an arc-shaped color changed part in the contact; and
a depth of a top of the color changed part is in a range of 0.1 mm to a value immediately above which will cause blasting of the contact.

19. (New) The cable connection method according to claim 1, wherein:
a layer of precious metal covers a surface of the conductor facing the contact;
the welding causes the layer of precious metal to disperse into the contact to form an alloy layer; and
the alloy layer has a depth in a range of 5 μ m to half a thickness of the contact.

20. (New) The cable connection according to claim 13, wherein:

the welding comprises an arc-shaped color changed part in the contact; and
a depth of a top of the color changed part is in a range of 0.1 mm to a value immediately above which will cause blasting of the contact.

21. (New) The cable connection according to claim 13, wherein:
a layer of precious metal covers a surface of the conductor facing the contact;
the welding causes the layer of precious metal to disperse into the contact to form an alloy layer; and
the alloy layer has a depth in a range of 5 μ m to half a thickness of the contact.